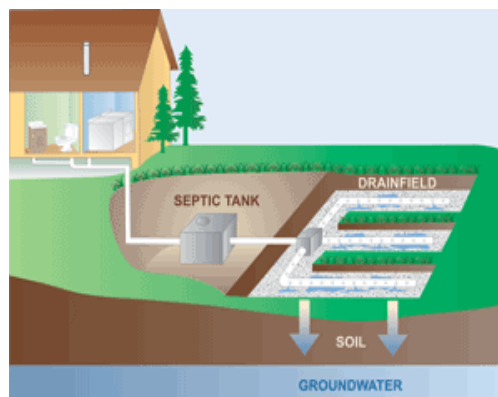


Septic System Care Is Up To You.

Protect your investment! More than 78,000 Snohomish County homes rely on septic systems. A failing septic system can be expensive to repair and is a serious health risk to your family and pets. By practicing proper septic system care and maintenance, you can protect your family's health and keep your septic system running for years to come.

► How does my septic system work?

Every type of septic system is composed of a septic tank and a drainfield. Wastewater from your household flows into the septic tank. In the tank, heavy solids settle to the bottom, forming a layer of sludge. Grease and light solids float to the top, forming a scum layer. As more wastewater enters the septic tank from the house, the separated wastewater in the middle layer of the tank is either pushed out or pumped into the drainfield. Microorganisms living within the drainfield consume leftover waste particles and harmful germs and viruses, cleaning the water before it seeps into groundwater.



Septic System Diagram - click to enlarge

The sludge and scum layers remain in the tank where naturally-occurring "good" bacteria work to break them down. Since the bacteria cannot completely decompose these solids, the layers continue to grow, slowly filling up the tank. These solids will eventually need to be pumped out by a certified professional.

There are many types of septic systems. If you don't know what type of system you have, visit the [Snohomish Health District As-Built database page](#) (external link). An "as-built" is the file on record for your property's septic system, and has information on the system type, a map showing where the septic system was installed on the property, and more.

View more information on caring for specific types of septic systems.

► What can I do to keep my septic system healthy and avoid expensive repairs?

There are many things that you can do to reduce the need for pumping and lengthen the longevity and performance of your system. Click on the Septic System Care guide to the right to find out more.



Go to the [Puget Sound Starts Here Septic Web Pages](#), a user-friendly website with lots of great information to help you care for your septic system and maximize its life. Find tutorial videos, helpful tips for finding a reputable professional, downloadable brochures, and more!

► How do I know if my septic system has failed and what do I do?

Stop, look, and smell! The most obvious septic system failures leave clues that are easy to spot. Be on the lookout for pooling of water or muddy soil around your septic tank or drainfield. Check for foul odors such as a "rotten egg" smell around your septic system or even in your basement. Notice if your sink or toilet backs up when you flush or do laundry. Look for lush green grass over your drainfield, especially during dry weather. If you have concerns, consult with the [Snohomish Health District](#) or a septic system certified professional.

► Septic System Resources

[Puget Sound Starts Here Septic Web Pages](#): This interactive website has lots of great information to help you care for your septic system and maximize its life. Find tutorial videos, helpful tips for finding a reputable professional, downloadable brochures, and more!

[Snohomish Health District Wastewater Program](#): Look up your septic system type and its location on your property at Snohomish Health District's online septic system "[as built](#)" database. The Health District is also your resource for septic system permitting and has a list of certified septic system pumpers and installers. There is also a telephone hotline to answer your questions at 425-339-5250. Calls can be anonymous.

Septic System Pilot Program: A septic system pilot program was conducted in coordination with Snohomish Health District in 2010 and 2011 to help homeowners with septic systems adopt everyday and long-term maintenance activities. This link includes helpful information on proper septic system care.

► Understanding Your Septic System

What type of septic system do you have?

The following is a list of septic system types currently installed in Snohomish County. If you don't know what type of system you have, visit the the [Snohomish Health District As-Built database page](#). You will be able to see what your septic system looks like, and what type it is.

1. Gravity
2. Low-Pressure Distribution
3. Subsurface Drip Systems
4. Mound
5. Sandfilter / Gravity
6. Sandfilter / LPD
7. Sandfilter / Drip
8. Sandfilter / Mound
9. Sand-Lined Bed
10. Aerobic Treatment Unit / Gravity
11. Aerobic Treatment Unit / LPD

- 12. Aerobic Treatment Unit / Drip
- 13. Aerobic Treatment Unit / Mound
- 14. Packed Bed Filter
- 15. Upflow Media Filter
- 16. Large Onsite Sewage System

How to care for your system type:

1. Gravity

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The liquid (effluent) then flows to the drainfield where it is disbursed through perforated pipes in the gravel trenches. In some cases, a pump is utilized if the drainfield is upslope from the septic tank. The effluent trickles through the gravel where it reaches the soil. The soil filters and treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly. Download WA Dept. of Health brochure, ["Understanding and Caring for Your Septic Tank System"](#) [pdf]

2. Low-Pressure Distribution

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The effluent flows to a pump tank where it is then pumped out to a network of pipes in controlled doses which insures uniform distribution throughout the system. The effluent leaves the pipes under low pressure through small diameter holes, and trickles downward through the gravel where it reaches the soil. The soil filters and treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly. Download WA Dept. of Health brochure, ["Understanding and Caring for Your Pressure Distribution System"](#) [pdf]

3. Subsurface Drip Systems

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The liquid (effluent) then flows to a pump tank that control dosing to the driplines. The treated effluent is pumped to a series of small diameter, flexible tubing (dripline) with inline emitters (orifices), usually installed 6-10" deep. The effluent is pumped into the soil using numerous, small doses throughout the day. The soil filters and treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly.

4. Mound

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The liquid (effluent) then flows to a pump tank where it is pumped to a mound system which consists of a raised mound of coarse sand media. Within the sand fill is a gravel bed with a network of pressurized pipes. Effluent is pumped through the pipes and trickles down into the gravel and sand layer where

treatment takes place before reaching the soil. The soil filters and further treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly. Download WA Dept. of Health brochure, ["Understanding and Caring for Your Mound System"](#) [pdf]

5. Sandfilter / Gravity

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The liquid (effluent) then flows to a pump tank where it is pumped into a sandfilter and treated by layers of sand and gravel contained in a watertight box. The treated effluent then flows from the bottom of the sand filter to the drainfield where it is disbursed through perforated pipes in the gravel trenches. The effluent trickles through the gravel where it reaches the soil. The soil filters and further treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly. Download WA Dept. of Health brochure, ["Understanding and Caring for Your Sand Filter System"](#) [pdf]

6. Sandfilter / LPD

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The liquid (effluent) then flows to a pump tank where it is pumped into a sandfilter and treated by layers of sand and gravel contained in a watertight box. The effluent is pumped from the bottom of the sandfilter to a network of pipes in controlled doses which insures uniform distribution throughout the system. The effluent leaves the pipes under low pressure through small diameter holes, and trickles downward through the gravel where it reaches the soil. The soil filters and treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly. Please click on the following links for specific operation and maintenance information for your septic system. Download WA Dept. of Health brochure, ["Understanding and Caring for Your Sand Filter System"](#) [pdf]

7. Sandfilter / Drip

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The liquid (effluent) then flows to a pump tank where it is pumped into a sandfilter and treated by layers of sand and gravel contained in a watertight box. The treated effluent is pumped from the bottom of the sand filter to a series of small diameter, flexible tubing (dripline) with inline emitters (orifices), usually installed 6-10" deep. The effluent is pumped into the soil using numerous, small doses throughout the day. The soil filters and treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly. Download WA Dept. of Health brochure, ["Understanding and Caring for Your Sand Filter System"](#) [pdf]

8. Sandfilter / Mound

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The liquid (effluent) then flows to a pump tank where it is pumped into a sandfilter and treated by layers of sand and gravel contained in a watertight box. The effluent is pumped from the bottom of the sandfilter to a mound system which consists of a raised mound of coarse sand media. Within the sand fill is a gravel bed with a network of pressurized pipes. Effluent is pumped through the pipes and trickles down into the gravel and sand layer where treatment takes place before reaching the soil. The soil filters and further treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly. Download WA Dept. of Health brochure, ["Understanding and Caring for Your Sand Filter System"](#) [pdf]

9. Sand-Lined Bed

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The liquid (effluent) then flows to a pump tank where it is pumped out to a network of pipes lying in a sand bed buried in the ground. The effluent leaves the pipes under low pressure through small diameter holes, and trickles downward through the sand layer where it reaches the soil. The soil filters and further treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly.

10. Aerobic Treatment Unit / Gravity

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The liquid (effluent) then flows to another tank (aeration chamber) where it come into contact with oxygen supplied by the treatment unit. These units can be blowers, air pumps, or compressors. The treated effluent then flows to the drainfield where it is disbursed through perforated pipes in the gravel trenches. The effluent trickles through the gravel where it reaches the soil. The soil filters and treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly.

11. Aerobic Treatment Unit / LPD

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The liquid (effluent) then flows to another tank (aeration chamber) where it come into contact with oxygen supplied by the treatment unit. These units can be blowers, air pumps, or compressors. The treated effluent is then pumped out to a network of pipes in controlled doses which insures uniform distribution throughout the system. The effluent leaves the pipes under low pressure through small diameter holes, and trickles downward through the gravel where it reaches the soil. The soil filters and treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly.

12. Aerobic Treatment Unit / Drip

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The liquid (effluent) then flows to another tank (aeration chamber) where it come into contact with oxygen supplied by the treatment unit. These units can be blowers, air pumps, or compressors. The treated effluent is pumped to a series of small diameter, flexible tubing (dripline) with inline emitters (orifices), usually installed 6-10" deep. The effluent is pumped into the soil using numerous, small doses throughout the day. The soil filters and treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

In Snohomish County, an Operations and Maintenance Agreement is required for installation of this type of system.

13. Aerobic Treatment Unit / Mound

The sewage from your house enters a large two compartment septic tank, where the solids settle out. The liquid (effluent) then flows to another tank (aeration chamber) where it come into contact with oxygen supplied by the treatment unit. These units can be blowers, air pumps, or compressors. The treated effluent is then pumped to a mound system which consists of a raised mound of coarse sand media. Within the sand fill is a gravel bed with a network of pressurized pipes. Effluent is pumped through the pipes and trickles down into the gravel and sand layer where treatment takes place before reaching the soil. The soil filters and further treats the effluent, removing bacteria and other pollutants before reaching the groundwater.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly.

14. Packed Bed Filter

Packed bed filters are basically containers packed with a filter media, and have a distribution or dosing system that provide for the aerobic, biological and physical treatment of the wastewater constituents as the applied wastewater system passes through and comes in contact with the filter media. Packed bed filters are also known as attached growth and trickling filters.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly. Please click on the following links for specific operation and maintenance information for your septic system.

15. Upflow Media Filter

Glendon® BioFilter Technologies and their affiliates currently market, design, construct, install, and service two models of residential wastewater treatment units. Both units are upflow media filters and are based upon the same patented principles, which involve the biological treatment of septic tank effluent as it flows upward through sequential layers of mineral filter media within an in-ground containment vessel and then out of the vessel through matric and gravitational forces. No separate drainfield is required as final treatment and effluent disposal occurs in the native soil surrounding the vessel. The effluent from the vessel is conveyed from the vessel to the prepared native soil through the cover sand material. This cover sand is the top layer of sand, which continues over the rim and out over the native soil at the perimeter of the containment vessel.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly.

16. Large Onsite Sewage System

Large onsite sewage systems are systems that are designed for flows greater than 3500 gallons of sewage a day and are under the jurisdiction of the Washington State Dept. of Health.

Properly operating and maintaining your drainfield will greatly reduce the potential contamination of ground and surface water. As a homeowner, you can save thousand of dollars in costly repairs if you take care of your on-site sewage system and use it properly. Please click on the following links for specific operation and maintenance information for your septic system

Download WA Dept. of Health 'Recommended Standards and Guidelines for Design Standards for Large On-Site Sewage Systems with Design Flows of Greater Than 3,500 Gallons Per Day'